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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,642	09/21/2000	Hu Yang	2039.008200	9201

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Raymund F Eich
Williams Morgan & Amerson PC
7676 Hillmont Suite 250
Houston, TX 77040

EXAMINER	
MULLIS, JEFFREY C	
ART UNIT	PAPER NUMBER
1711	11

DATE MAILED: 09/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/666,642	YANG ET AL.	
	Examiner	Art Unit	
	Jeffrey C. Mullis	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 June 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-30,32-73,75-91 and 93-115* is/are pending in the application.

4a) Of the above claim(s) *12-14,16,38-30,32-40,42,67-69,81-83,85,99-101,114* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-11,15,17-30,32-37,41,43-66,70-73,75-80,84,86-91,93-98,102-113 and 115* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

All remaining rejections and/or objections follow.

The Examiner acknowledges that this application is a CIP of Serial No. 09/595,410 filed 6/16/2000 which is a CIP of Serial No. 09/575,094 which was filed 5/19/2000.

Claims 1-4,6-11, 15, 17-30,32-37, 41, 43-66, 70-73,75-80, 84, 86-91,93-98, 102-113 and 115 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

It is not clear what the entire scope of "oxygen scavenger polymer" is since any organic material will react with oxygen given enough time and therefore could be viewed as an oxygen scavenger.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4,6-11, 15, 17-30,32-37, 41, 43-66, 70-73,75-80, 84, 86-91,93-98, 102-113 and 115 are rejected under 35 U.S.C. §

103(a) as being unpatentable over Bansleben et al. (USP 6,255,248) in view of Cahill et al. (USP 6,083,585).

See the Office action at the paragraph bridging pages 3 and 4 et seq.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4,611, 15, 17-30,32-37, 41, 43-66, 70-80, 84, 86-73,75-91,93-98, 102-113 and 115 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5-7, 9-22, 24-26, 28-50, 52-72 and 74-78 of copending application Serial No. 09/595,410. Although the conflicting claims are not identical, they are not patentably distinct from each other because the species of each application overlap and therefore choice of one specie over another would have been obvious in the expectation of adequate results.

This is a *provisional* obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' arguments filed 6-10-02 have been fully considered but they are not deemed to be persuasive.

Applicants are correct that Serial No. 09/595,410 is a continuation-in-part of copending 09/575,094.

With regard to the term "oxygen scavenging polymer", applicants argue that excessively low oxygen scavenging capacity and excessively low oxygen scavenging rate in an organic material would not be useful in a packaging application. However polymers are used in packaging applications even where oxygen scavenging property is not present as in films in which oxygen barrier property is present but not necessarily an oxygen scavenging property. Therefore, reference to the issue of scavenging rate or capacity would not be useful in determining whether material should be viewed as an oxygen scavenging polymer.

With regard to the rejection under 35 U.S.C. § 103 and Bansleben et al., applicants argue that Bansleben's polymers containing units such as cyclopentene would not have a backbone which is ethylenic. The Examiner agrees with applicants that the structure on page 8 would be present in Bansleben's polymers. However the ethylene derived units would have an ethylenic structure and any polymer containing ethylene units could

properly be referred to as having an ethylenic backbone. Unpatented claims are given their broadest reasonable interpretation consistent with the specification. It is noted that applicants' claims recite "comprising an ethylenic backbone" and therefore do not exclude other units in the backbone and in any case the cyclopentene unit contained in the backbone could reasonably be viewed as an ethylenic unit containing a 3 carbon bridge. It therefore does not reasonably appear that applicants' claims exclude the cyclic units of Bansleben. While it is true that the cyclic units of Bansleben such as those derived from cyclopentene are taught by Bansleben to confer oxygen scavenging ability, such units are not excluded by applicants' claims nor does Bansleben imply that the remaining types of units present in Bansleben's polymers are not oxygen scavenging units. Note in this regard column 3 lines 56-70 of Bansleben clearly discloses that vinyl cyclohexene mer units may be present and implies that the vinyl cyclohexene units also confer oxygen scavenging ability since it is disclosed that "other mer units which provide other oxygen scavenging properties may also be employed". It is noted that Bansleben provides numerous examples in which vinyl cyclohexene, embraced by applicants' "cyclic olefinic pendant group" are present. Lastly, there is nothing in the instant claims which requires that the vinyl cyclohexene units be oxygen scavenging but in any case it is the position of the Examiner

that those of ordinary skill in the art when reading the disclosure of Bansleben would conclude that the vinyl cyclohexene units of Bansleben would confer some oxygen scavenging ability.

With regard to Cahill, this reference is only used for Cahill's disclosure of block copolymers containing PET as well as polybutadiene segments which are cross-linked which are not required by most of applicants' claims. Applicants argue that there are a number of differences between the primary and secondary references. However this is always the case in a rejection under 35 U.S.C. § 103 relying upon a primary and secondary reference. It does not appear that any differences in the primary and secondary references are such to lead those of ordinary skill away from the modification proposed by the Examiner in that it would reasonably appear to those of ordinary skill in the art that the benefit disclosed by the secondary reference are use of the PET bonded with polybutadiene segments as being extendable to the primary reference. With regard to the use of condensation polymers, it is noted that both the primary and secondary references disclose PET in compositions.

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first

response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

Jeffrey Mullis
Primary Examiner
Art Unit 1711

J. Mullis:cdc

September 5, 2002

Jeffrey M
Primary Exam
Art Unit 1711